CLAIMS

What is claimed is:

1. A method for collision recovery interface support in a home phoneline networking alliance (HPNA) control chip, the method comprising the steps:

(a) providing transmit data path logic to receive and transmit data packets within the HPNA control chip; and

(b) consolidating the transmit data path logic to include a transmit state machine that handles interfacing the transmit data path logic to at least two separate collision recovery logic means of the HPNA control chip through a minimal number of generic interface signals.

2. The method of Claim 1 wherein the minimal number of interface signals further comprises a GO signal from each separate collision recovery logic means.

3. The method of Claim 2 wherein the minimal number of interface signals further comprises a new transmit signal.

4. The method of Claim 3 wherein the minimal number of interface signals further comprises a transmit done signal.

5. The method of Claim 4 wherein the minimal number of interface signals further comprises a transmit priority indicator from the transmit data.

6. The method of Claim1 wherein the at least two separate collision recovery logic means further comprises a BEB collision recovery means.

7. The method of Claim 6 wherein the at least two separate collision recovery logic means further comprises a DFPQ collision recovery means.

8. A system for collision recovery interface support in a home phoneline networking alliance (HPNA) control chip, the system comprising:
at least two collision recovery means for providing collision recovery in the HPNA control chip according to at least two data rate standards; and
a transmit data path logic means including a transmit state machine that interfaces with the at least two collision recovery means through a minimal number of generic interface signals.

9. The system of Claim 8 wherein the minimal number of interface signals further comprises a GO signal from each collision recovery means.

10. The system of Claim 9 wherein the minimal number of interface signals further comprises a new transmit signal.

11. The system of Claim 10 wherein the minimal number of interface signals further comprises a transmit done signal.

12. The system of Claim 11 wherein the minimal number of interface signals further comprises a transmit priority indicator from the transmit data.

13. The system of Claim 8 wherein the at least two collision recovery means further comprises a BEB collision recovery means.

14. The system of Claim 13 wherein the at least two collision recovery means further comprises a DFPQ collision recovery means.

15. A home phone networking alliance (HPNA) network control chip capable of collision recovery interface support, the chip comprising:

a media independent interface (MII);

a physical layer (PHY); and

a media access control (MAC) coupled between the MII and the PHY, the MAC further comprising at least two collision recovery means for providing collision recovery according to at least two data rate standards, and a transmit data path logic means including a transmit state machine that interfaces with the at least two collision recovery means through a minimal number of generic interface signals.

16. The method of Claim 15 wherein the minimal number of interface signals further comprises a GO signal from each collision recovery means, a new transmit signal, a transmit done signal, and a transmit priority indicator from the transmit data.

17. The method of Claim 15 wherein the at least two collision recovery means further comprises a BEB collision recovery means.

18. The method of Claim 17 wherein the at least two collision recovery means further comprises a DFPQ collision recovery means.